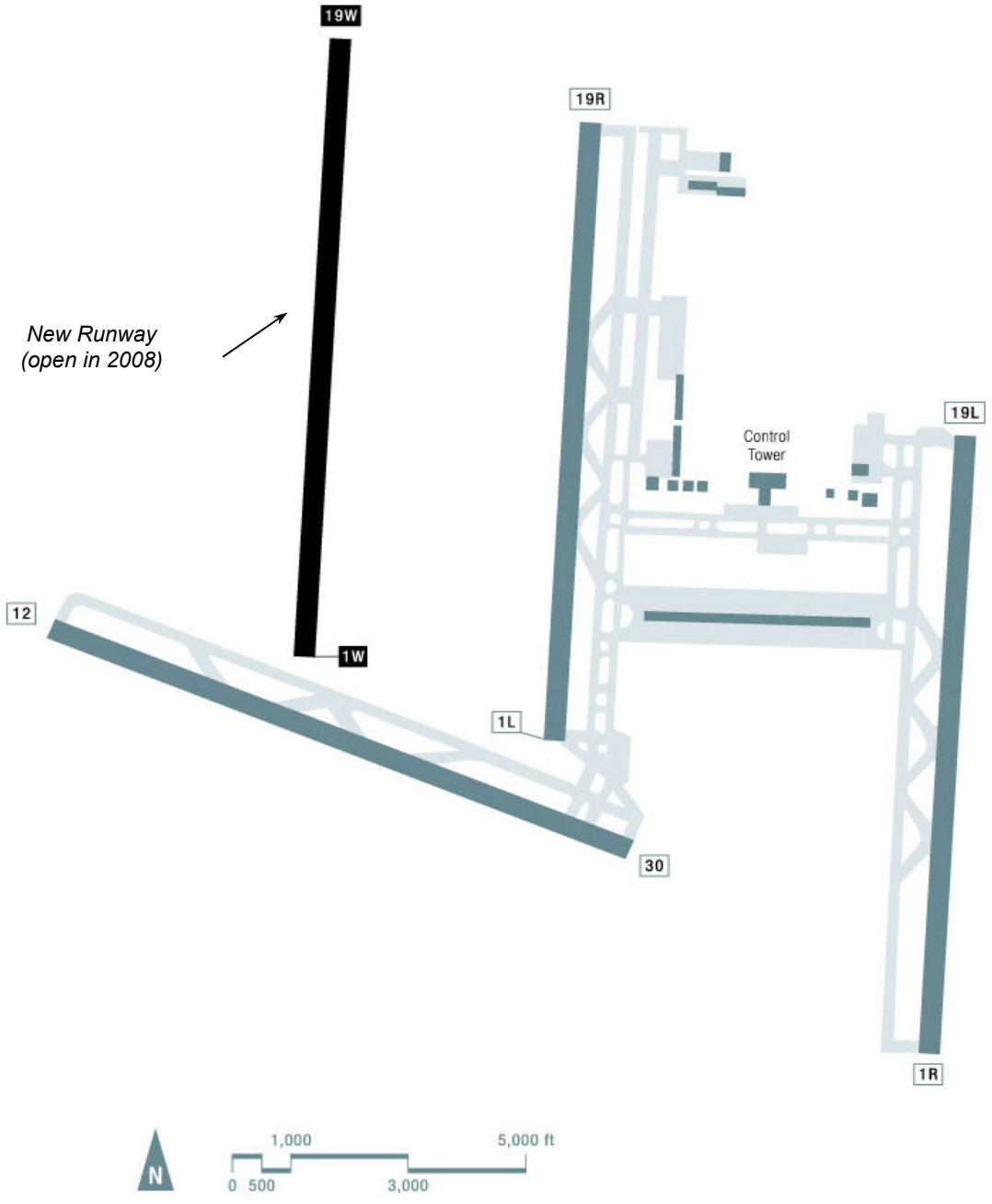
WASHINGTON – Washington Dulles International (IAD)



Benchmark Results

- The capacity benchmark for Washington Dulles International Airport today is 135 flights per hour (arrivals and departures) in Optimum weather, when visual approaches can be conducted.
- The benchmark rate falls to 114-120 flights per hour in Marginal conditions, and 105-113 flights per hour in IFR conditions.
- A new runway, planned for completion in 2008, is expected to improve the benchmark rates for IAD by as much as 22 to 41 percent, depending on conditions. The projected increase in the benchmark rate can occur only if ground infrastructure, environmental constraints, staffing and equipment requirements allow triple simultaneous approaches. However, triple simultaneous instrument approaches will not be implemented when the runway opens, and it is unlikely that such approaches would be implemented until required by traffic levels. The increase in actual operations may be less if airspace restrictions prevent full use of the new runway.
- Other planned technological improvements at IAD would increase the benchmark rate in Marginal conditions. The benefit in Marginal conditions assumes that all arrivals can use CEFR to achieve visual separations.
- Note that these benchmark rates do not represent balanced operations. IAD rarely operates a balanced configuration. For Optimum and Marginal conditions, the facility reported two rates: an arrival priority rate and a departure priority rate. The Optimum rates are 90 arrivals, 45 departures per hour (90,45) for arrival priority and 45,70 for departure priority. In Marginal conditions, the reported rates are 75,45 and 45,75.
- These rates are based on different runway configurations that favor either arrivals or departures. The benchmark capacity curves combine both preferred configurations for Optimum and Marginal conditions; therefore, frequency data for a single “most common” configuration is not relevant.
- Only a single configuration is used in IFR conditions. The peak arrival configuration in good weather, triple converging approaches, is not available below 1000/3, and so the same configuration can be used for both arrival and departure peaks.
- In the following charts, please note that combining arrival configuration capacity with departure configuration capacity moves the airport’s overall capacity frontier beyond what can be achieved by a single configuration. The result is a higher arrival priority and/or higher departure priority capacity, compared to what can be achieved by a more balanced configuration.

These values were calculated for the Capacity Benchmarking task and should not be used for other purposes, particularly if more detailed analyses have been performed for the airport or for the individual programs.

The list of Planned Improvements and their expected effects on capacity does not imply FAA commitment to or approval of any item on the list.

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Weather	*Scenario*	*Configuration*	*Procedures*	*Benchmark Rate (per hour)*
Optimum Rate	**Today***	Arrivals on 12, 19R, 19L (1R, 1L) Departures on 19L (1R, 30) *Frequency of Use: see text*	Visual approaches, visual separation	**135**
Ceiling and visibility above minima for visual approaches (3000 ft ceiling and 7 mi visibility)	**New Runway (2008)**	Arrivals on 19R, 19L, 19W Departures on 19R, 19L, 19W	Same, with triple simultaneous visual approaches	**171**
Occurrence: 80%	**Planned improvements (2013), including new runway**	Same		**174**
Marginal Rate	**Today***	Arrivals on 12, 19R, 19L (1R, 1L) Departures on 19L (1R, 30) *Frequency of Use: see text*	Instrument approaches, visual separation	**114-120**
Below visual approach minima but better than instrument conditions	**New Runway (2008)**	Arrivals on 19R, 19L, 19W Departures on 19R, 19L, 19W	Same, with triple simultaneous instrument approaches	**171**
Occurrence: 11%	**Planned improvements (2013), including new runway**	Same	Triple simultaneous visual approaches, visual separation	**174**
IFR Rate	**Today**	Arrivals on 1R, 1L Departures on 1R, 30 *Frequency of Use: 54% in IFR conditions*	Instrument approaches, radar separation	**105-113**
Instrument conditions (ceiling < 1000 ft or visibility < 3.0 miles)	**New Runway (2008)**	Arrivals on 19R, 19L, 19W Departures on 19R, 19L, 19W	Same, with triple simultaneous instrument approaches	**150**
Occurrence: 9%	**Planned improvements (2013), including new runway**	Same		**150**

* Today Scenario includes both arrival and departure push (in parenthesis) configuations.

NOTE: Data on frequency of occurrence of weather and runway configuration usage is based on FAA ASPM data for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time.

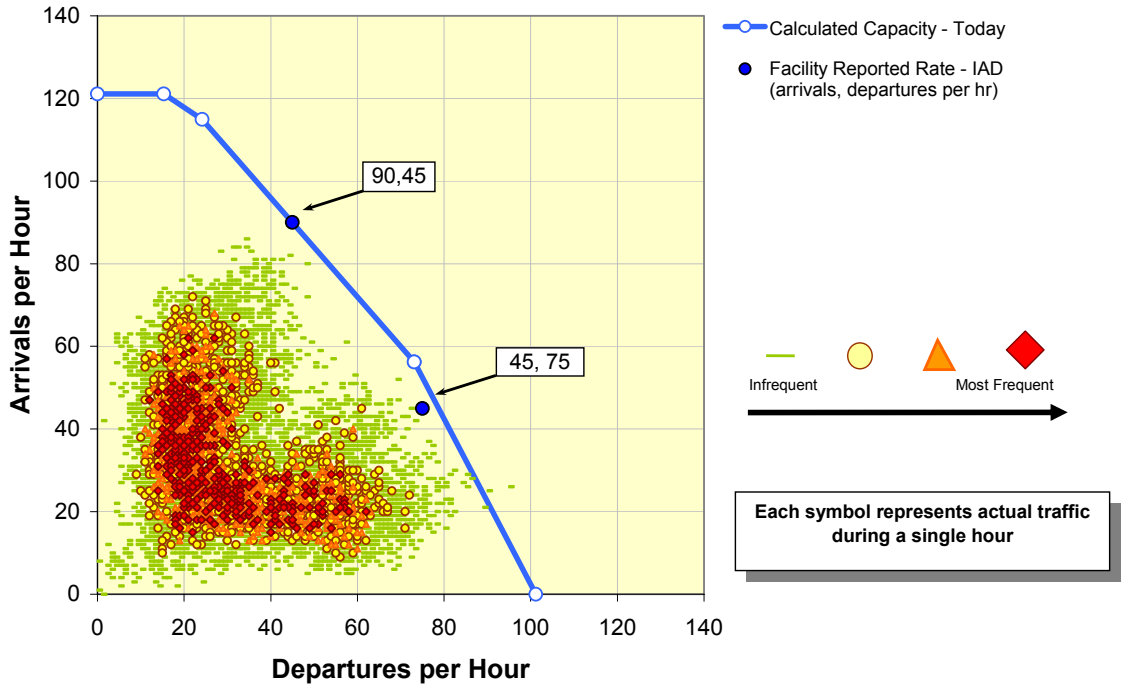
Planned Improvements at IAD include:

- CEFR, for reduced in-trail separations between arrivals in Marginal conditions.

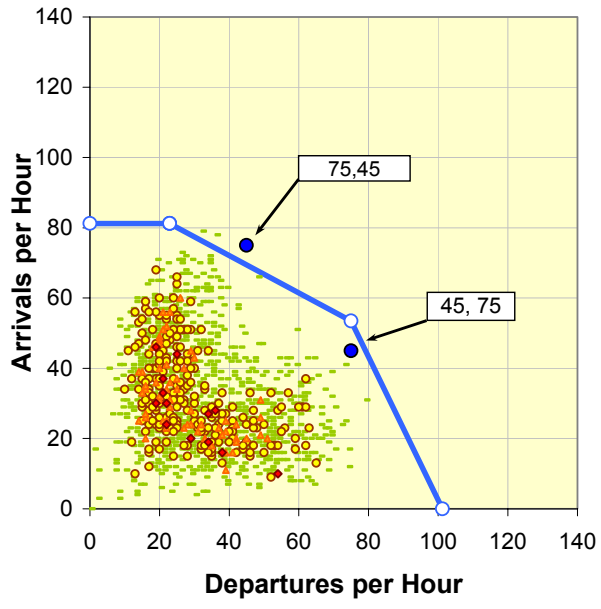
Additional information on this improvement may be found in the Introduction and Overview of this report, under “Assumptions.”

Calculated Capacity (Today) and Actual Throughput

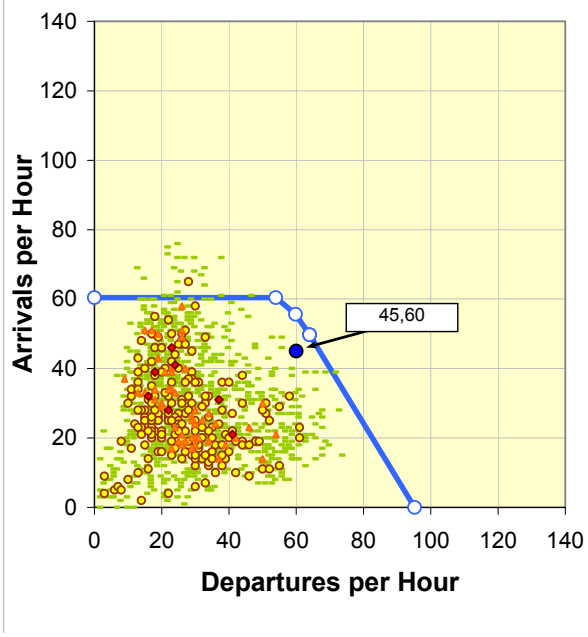
Optimum Rate



Marginal Rate



IFR Rate



Hourly traffic data was obtained from the FAA ASPM database for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time. Facility reported rates were provided by ATC personnel at IAD.